



JOINT LEGISLATIVE EMERGENCY MANAGEMENT OVERSIGHT COMMITTEE

February 15, 2018

Room 544 of the Legislative Office Building

The Joint Legislative Emergency Management Oversight Committee met on Thursday, February 15, 2018 at 9:05 AM. The meeting was held in Room 544 of the Legislative Office Building. Members present were: Rep. Jamie Boles, Rep. Mike Clappitt, Rep. Garland Pierce, Rep. Larry Pittman, Rep. Michael Speciale, Sen. John Alexander, Sen. Ron Rabin and Sen. Norm Sanderson.

Senator Ron Rabin presided.

Senator Rabin spoke of the incident in Florida that occurred yesterday. With the very serious thing we are dealing with here in the Emergency Management Oversight committee. There simply has to be answers to these problems. I think it also reinforces the idea that while we may not be able to preempt, we darn sure need to try to preempt and not just throw our hands up. I think our committee can put forth some legislation that tries to fix the problem.

Representative Faircloth – we are coming a day after the event. It always raises our concerns and can make us feel helpless. We can't take that attitude, we have to find a way to deal with these situations.

Q: Chairman Faircloth- On my way in today, I heard that the incident in Florida had a system where they could lock all the doors to the school if something was happening. In fact they locked the doors, the kids were protected and someone, possibly the shooter tripped the fire alarm, causing the doors to be opened. Is this a common problem with our buildings in this state? Are you aware of that situation?

A: Mr. Brian Taylor- The fire official has to sign off on every code, International and North Carolina amendment codes. What we call the late egress or access control into those facilities, in the Safe Schools initiative across the country, you want to control access to the facility so no one can just walk in off the street. That doesn't affect the egress component of the hardware. Some have delayed egress so that if the fire alarm goes off, it will have 15 seconds. That is a concern because we know if a fire alarm is pulled that can be devastating. We as code officials across the country have to evaluate that because if it is on fire we want to evacuate, but how can we control a situation like this. It depends on how it was setup, but for a person to set the alarm off, he had to have access to the building and what I think our state is doing a good job at controlling access to get in the building. Generally, there is someone to sign you in and control who is in the building, so there is not completely free access to the building.



Q: Rep. Mike Clampitt- On this event that happened in Crabtree Mall, has there been any follow up to mall management to find out what they have done to correct these situations? I know mall management has the responsibility to protect all the people that are there for shopping or employment. Do you know if there has been any follow-up with mall security?

A: Mr. Bryan Taylor- Not with the mall from our standpoint. We rely on the local fire departments to do that, with the records they have for what they have been sighted for. Probably anytime a fire official goes in, if he goes in today he may not be back in for one year. So what happens day in and day out is a concern. So we have to work with the local fire department. Raleigh Fire Department would work with those local mall management groups and security firms working the contracts for that location. They would provide them the education that they can be sure these exits are kept clear at all times. Also, that their maintenance personnel are there every day and have a route they take to be sure they clear those exits. So the fire department has taken the steps to make sure they do the annual inspections, but what the store operators/owners do every day are very difficult to manage. So we put that back on the owner of the mall to manage that.

Q: Rep. Mike Clampitt- We know life safety is paramount (which that is fire protection safety 101) with that being said, is there anything in administrative code currently to increase the penalties for violators? Do we need to put some teeth in the administrative code? I'm not saying adding new regulations, I disagree with that. Do we need to up the penalties for second and third occurrences?

A: Mr. Bryan Taylor- I think a guideline to help the locals, set forth their fees and pay schedules would be helpful. A lot of the departments across the state may use others fee schedules. And a lot of those go to the larger cities to utilize their fee schedules. So if the legislators would set a guideline as to what the fees for the first offense is then the departments would decide do we double second offenses, triple third offenses. Administrative code will allow you to cut the power off after three fences but you have to prove that those offenses occurred. You also have to give eight hours of notice to cut the power unless there's an immediate danger to life.

Q: Rep. Mike Clampitt- Considering the tragic events in Florida last night, and knowing that we can pull a fire alarm. Fire alarms have to be accessible to everyone. Knowing the school policy of fire department drills, may I ask you and the office of state fire marshal to come up with some additional information? Since the testing is the most vulnerable time we have and everyone knows there will be a test. So I ask the department to review the current testing policy and see what we need to do in our state requirement for school fire drills.

A: Mr. Bryan Taylor- Yes we can take a look at that and work with our Building Code Council and Department of Public Instruction since it is a general statute that says when they should perform those trials There's a lot of variables like is the building protected with sprinklers, the distance of exits, and things of that nature. We will take that as a high priority to look at

Q: Rep. Mike Clampitt- We have a program that is called "call in your pothole concerns" and the thought occurred to me what if we had a "call in a fire code violation"? What would be the feasibility and cost?



A: Mr. Bryan Taylor- Thank you, we will take that into consideration and look to see the possibilities of that.

Q: Sen. John Alexander- whenever you have an instance where you have multiple agencies to respond, is it predetermined as to who will be the overall commander in Chief? Is that worked out on the scene, or is that worked out through collaboration? It seems like somebody has to be in charge.

A: Mr. Bryan Taylor- That's exactly right. It's very important to have that incident commander and of course with an active shooter it's rightfully law enforcement. If it's a criminal act no matter what, it's law enforcement. If it is fire related it's for the fire department. If it's rescue it's the fire service or first responders. We all know our roles and responsibilities and we know what we bring to the table. We never want to have a turf war with fire, police or emergency. They have predefined roles and understand when they are support or command. What the fire service brings to the table is having schematics of a facility, understanding where you cut the power or water off at, that's a very valuable piece of information.

Q: Sen. John Alexander- Let me ask you about clear text. It looks like fire departments have integrated. Is this some type of radio system that people with scanners cannot get to?

A: Mr. Bryan Taylor- It is clear English. In other words it's saying 10-4, 10-17. It's saying we are en route, we are on scene. You're using clear text instead of an agency using different language.

Q: Rep. Jamie Boles- would it be fair that North Carolina is moving in the right direction as far as Viber? If there is a mass disaster, we should be able to communicate with each other. If you just like to comment.

A: Mr. Bryan Taylor- The valuable asset is emergency management, and that you're able to bring in the communications. In the Charlotte area they have the use of Viber, in the world areas they do not have that capabilities. And that's where the valuable asset for emergency management to have the communication.

Q: Sen. Norm Sanderson- I just take for granted that all fire inspections are announced inspections. Is that correct?

A: Mr. Bryan Taylor- They are in schools it has to be between a certain time and that is every six months. The second one is generally unannounced. The principals are required to conduct drills in house. It could be active shooter or lockdown. It could be a bank robbery or something that occurred outside of the school. Also tornado drills.

Q: Sen. Norm Sanderson – We know any time something happens with children in a school, especially heinous acts, we know these can happen in other locations other than schools. Are these fire inspections unannounced? Is there a possibility to make these unannounced? Is there a possibility to go today and do leg inspection and then turn around and go in another week? That I consider as unannounced and unpredictable. Is it personnel as why we're limited to twice a year requirement?



A: Mr. Bryan Taylor- State law basically says once a year for Assembly occupancies such as certain businesses. Some occupancies can be every three years. A church maybe every three years, and they are one of the most difficult to preform because there's not always someone there when they are out on routine visits. To answer the part on unannounced, what we run into such as a nursing home is they are constantly doing maintenance and have fire alarms. If you go to a large venue, such as the Panthers football game and there are things set in place such as you have fire watch in full companies there without the components going off.

Q: Sen. Norm Sanderson- are we still building educational buildings on multilevel, two or three stories high? That just seems like a disaster waiting to happen.

A: Mr. Bryan Taylor- I'm not seeing where a new school is built from the ground up multi-level. I'm seeing where schools are being renovated especially in rural areas that want to preserve some of the properties. We would highly discourage renovating multistory buildings in elementary.

Rep. Garland Pierce- Are the schools designed to automatically lock all doors, if something came up. Is that something you're seeing?

A: Mr. Bryan Taylor- At no point are the schools actually locked from one point. What the local schools have done with the safe schools initiative, is primarily with what they're doing is controlling access from one point. They're controlling who has access into the facility. The doors are locked to the outside, but not inside. You usually need a key or access card to control access into the school but never access out of the school.

Rep. Garland Pierce- Are you seeing a lot of new schools design with two doors on one level instead of multiple entryways coming in? That would be a way to escape tragedy.

A: Mr. Bryan Taylor- most of your designs are designed with outside exits to prevent having to do a sprinkler systems. That's something we can look at as code officials to have more outside exits.

Rep. Jamie Boles- In the safe school initiative, were you all a part of that?

A: Mr. Bryan Taylor- I sit on the SERC Commission, but am not on the Safe Schools Initiative, but am updated when they update.

Rep. Jamie Boles- As the state fire marshal, you all are not sitting on the Safe Schools Initiative?

A: Mr. Bryan Taylor- No sir.

Chairman Ron Rabin- So let me go to the question about your inspections. In candor, when these inspections are made and they get to know each other, is it an absolute this is wrong- fix it or well you can fix this- I won't report it?

A: Mr. Bryan Taylor- a situation can be local, political in who you know, so it can tie our hands in certain things. It's the code enforcer's responsibility to cite that code violation, but if someone above him waives that fee that's a challenge we have. But the enforcer can lose his job for not properly citing that location.



Chairman Ron Rabin- would it enhance the inspection process, if inspectors didn't go to the same places all the time? Maybe randomly selected or cross districts? The codes should be the same no matter where you are.

Rep. Mike Clappitt- you have jurisdictional issues going from one county to another. The state fire code is all 100 counties, but the fine structure can vary by county. My experience was whenever you did an inspection regardless of what was wrong you wrote it down on the on the CDI.

Rep. Jamie Boles- Who is responsible to inspect schools? Is it the local authority or is it the state fire marshal?

A: Mr. Bryan Taylor- it is the authority of the local official. In the municipal department it would be the local fire official in that city. If it does not have a contracted with the county. So a fire official has to be in a school twice a year and a building inspector/electrical inspector in the schools once a year. So the local jurisdictions to the school systems, the community colleges and our offices do the universities.

Rep. Jamie Boles- In the local official's inspection of the schools twice a year, where are those reports housed? Are they housed locally or sent to you?

A: Mr. Bryan Taylor- those reports stay with the fire department, the principal has one and by statute a letter or copy has to be provided to the superintendent.

Q: Rep. Jamie Boles- Ultimately, the responsibility rises to your office, correct?

A: Mr. Bryan Taylor- That is correct.

Rep. Jamie Boles- I have two concerns. 1) You are not getting the reports from the locals. Especially the reports from the schools, that they are being inspected twice per year. 2) That your office is not involved in the Safe School Initiative.

Q: Chairman Ron Rabin- Both here and at some off-sites, the committee has been exposed to knowledge that there is a lot known about the architecture of buildings to make them safer for schools, public buildings or the extension to the public sector. Do you think it would be a good idea to pursue that sort of thing so when we build a school part of the architectural aspect is X, Y and Z are incorporated so it helps the safety issue?

A: Mr. Bryan Taylor- I think we ought to take that into consideration. The schools themselves are designed and the citations we may see are a lot less than we would see at a mall situation or other occupancies. Those would be more of a priority because we are in the schools more often. They would abide by the regulation. Have schools been fined? Yes, they may not have repaired exit lights. Principals may have been put on the hot seat for not conducting the fire drills for what the statute said but the focus is on education. The code violations are more high priority. The school systems are doing a really good job. We just have to train the responders at doing a unified job. Do we have the video cameras throughout the schools, panic buttons to verify where the situation is occurring not just knowing it is in the school but also where such as room number. How can we improve on that? That's video camera access, panic button location data,



incident command whether in the patrol car or on the ground. Those are things we can start doing at the state level to help fund those activities.

Q: Chairman Ron Rabin- Are the building plans available to you as they are to some of the other first responders?

A: Mr. Bryan Taylor- Your fire service officials actually have those because the plan reviews they have done on the construction of the building. They have had access to them for years. Yes they do pre-fire plans for the ratings on insurance. The fire service has to prove they inspect the facility.

Q: Chairman Ron Rabin- If the building code and structure included something to sensor or pick up the hot spots where a fire or people are located and that were projected into your situation awareness or command-and-control center is, would that be helpful enough to pursue the idea? If you're going to have a building code fixes then let's make them safer. One thing you would want to consider is infrared sensors around the building.

A: Mr. Bryan Taylor- We do not have infrared sensors but we do have smoke and heat sensors that would activate and send a signal to the alarm.

Q: Chairman Ron Rabin- One of your charts showed run and not hide in a room, but right now Emergency Management says run, hide and fight. Are you saying not to hide?

A: Mr. Bryan Taylor- Yes we are saying not to hide. You have greater chances of survival without staying in one location during a fire. If you're in a fire, you have greater chance of survival getting out than staying put. When you lock yourself in one location you have become like a fish in a bowl. I agree with Emergency Management in their situation your best outcome may be to hide. I did not include fight in the fire management situation.

Q: Sen. John Alexander- You made mention that the fire officials have access to the building plans when they are designed and built. When schools, in particular, add on or update do you get this information as well?

A: Mr. Bryan Taylor- Yes, we approve all plans for schools, hospitals and nursing homes at the state level. Those plans are also kept at the local level. They turn those into the pre-plan incident.

Rep. Garland Pierce- Have you ever evaluated a school system or area with a lot of people for active shooter? Maybe showed up unexpected and asked them to perform the drill? Show me what you would do in this incident of active shooter, have you ever done that?

A: Mr. Bryan Taylor- Yes sir, local agencies but not our office in particular does this. The local agencies work with Emergency Management, local fire departments and law enforcement. They have been actively going on for years.

Mr. Bryan Taylor- I would like to emphasize that with Commissioner Causey and myself, both being new to state government and speaking for the Fire Service of North Carolina and the relationship with Emergency Management, the Highway Patrol and OEMS. We are working on these partnerships that is growing. Under the Emergency Operation plan we work hand in hand,



our staff does our EMT con-ed. We interact day in and day out. We are working to do some training in the near future, especially since they had an incident near Charlotte exposing them to a lot. We are working behind all the state agencies you work with. We all have the common goal to take that down to the local level.

A motion was made for the approval of the January 25, 2018 minutes. The minutes were approved.

Mr. Todd Walker, XXXX, TigerSwan, LLC, Presented. (See Presentation)

Q: Rep. Garland Pierce- I'm retired from the United Postal Service and on my way out the door they had a device that could follow every truck and could tell where you were at all times. Are you somewhat advocating that all those who work in like law enforcement and you said something about privatization, have a device that can track not every little thing that they are doing, but you could know where they are at any given point. That's a great thing, I would think, to know where they are because you said you had a hard time finding somebody. Are you advocating that or are you just saying that your company has this device they came up with?

A: Todd Walker- Am I personally advocating that? I'm not personally speaking, I'm speaking for TigerSwan. It's a technology that we make available. I will tell you if I were a law enforcement official, I would love to have that technology because if you are responding to a situation and you leave your vehicle and you're on foot then perhaps if I'm tracking your vehicle I know where your vehicle is, but how do I know if you're separated from your vehicle? Once you're on foot and pursuing a suspect that distance can be covered rapidly and the ability for and operations center or a partner to know where you are we need to get them on it especially if you're engaging in a dangerous situation. I would think that any law enforcement officer would want that ability.

Q: Rep. Garland Pierce- I didn't mean the term advocate, that was not a good choice of words. I do see where you're going with that. I think that's really important now a days in the world that we're living in to certain type jobs somebody needs to know where you are, not when you're on lunch break and all those things. You're right because in those rural areas like where a lot of us come from, you could get into situations and no one would know where you are. I think that's a great thing. Thank you for your presentation.

A: Todd Walker- Well if you take it from a safety perspective, I'll give you an example; You remember when there were coordinated attacks in Paris correct? When we got word that those attacks were happening our platform put what we call a "geofence" around the city of Paris. We have mass notification ability and we sent a mass notification to everyone within that geofence and at that time we had 30 clients of TigerSwan that had the phone app on their smartphone device. Out of those 30 clients, 8 responded that they needed assistance. So out of those 8, five we were able to actively direct them to safe zone areas within the city. The three remaining required further assistance. We were able to send in our partners in Europe that have response teams to take them to a safe location so there is that use in a developing situation we were able to react within.



Chairman Rabin- The reason we thought this would be a valuable presentation is that it would increase our situational awareness about what's out there.

Q: Senator John Alexander- You were referencing the wildlife resource officer who was beaten and left for dead, and we were not aware of that and that's horrible. You said that you have technology that you could find out where this person was. Obviously a lot of people carry smartphones and if he has got that with him that is fine, but I would imagine if somebody means great harm to him they're going to take that away from him or destroy it. I think you said you have a technology, GSM, that would be able to find that individual who had been beaten and left for dead.

A: Todd Walker- Well we were talking GSM GPS. GSM is the cellular network, GPS is a device such as this that we use down in Puerto Rico, or a device such as the phone. The reason I mentioned that for the wildlife resource officer is that they operate sometimes in areas where the cell phone network is not as robust as it is here in Wake County. There would be a combination of utilizing the smartphone app with a GPS device so that if they get out of the cellular network we're still able to track them. And what I was mentioning was having that technology to find out where they are. We had an officer that had an area that he was going to patrol that day. His operations center can put a geofence on that area within our platform and a set of rules to say if he is not out of that area by a certain time we need to check in with him to find out if anything is wrong. Of course if you're not getting that communication if he doesn't follow that rule and hasn't moved out into that next area in that specified time then that gives us, basically it's a monitor that gives the operations center a clue that something's not right maybe it's not for any other reason than the fact that he just got delayed. It gives you the ability to check in and find out what the situation is and be aware of what the situation is instead of 6,10,15 hours pass and no one is aware that anything is wrong. At that time you may have surpassed the point in time where life saving measures could be taken

Q: Chairman John Faircloth- Obviously technology has come a long way from when I was on the streets in Greensboro with a Korean War portable radio that weighed 50 pounds and that was the only communication I had. I guess what I'm concerned about is you mentioned that their RFP and decisions were made that in interim to take that back so it wasn't fulfilled. Are you working towards a RFP, do we have to buy something or is there a possibility that if needed it can be contracted? Can you tell me how all that works?

A: Todd Walker- Well sir look at it a couple of ways. When we were asked to come in for Mathew we came out there on the fly and there was no infrastructure in place to put our technology up here. The tracking devices weren't already deployed with the first responders and our technology wasn't integrated across the entire enterprise so from an operational/effective method us coming out of this just contracted for a specified event doesn't make much sense. From a financial perspective if this is something that is an ongoing process that our sensors are out there if they've already been deployed with first responders and people are already adapted to using the platform itself now, I think having us come in and operate the system for you from a cost perspective is not as good as having people who are actually in the agencies who are able to utilize them.



Q: Chairman John Faircloth- I guess what I'm a little confused about is that you've mentioned these places you've been to like Puerto Rico. You obviously had been there after something had happened and you were able to integrate. Why would that not work in Sampson County North Carolina for instance?

A: Todd Walker- Yes sir we can do it. I'll be honest with you we are a small company in order to bring that manpower there depending on what our operational tempo in our company is at that time. There may be a possibility that we do not have the robustness to be able to go in and effectively deploy/ integrate at that level. We were fortunate in Puerto Rico to be able to do that, but as Puerto Rico extended we had other requirements and tasks

Q: Rep. Jamie Boles- I am familiar with your technology, and I believe you've been working with Emergency Management. I don't want to put him on the spot, but if Director Sprayberry could just comment because I think it worked very well for him and I think that these are some of the tools in the toolbox that were asking for

A: Director Mike Sprayberry (North Carolina Emergency Management) - As Todd was showing, we have used them on multiple occasions. They just invoiced us and we paid the bill. We integrated them into the process, but the bottom line is that enhanced situational awareness gives me as the State Emergency Response Team Leader the information I need to make a more informed decision about where to place resources. And so if we can share information like this for instance, if we send in a resource downrange to one of our counties, like Stanley County and Craven County or something and were sending swift water rescue down there we can tell them that it's coming. But with this he can actually see where it is and know where it's coming. You heard him talking about we can have them around places where we have flooding or maybe the roads blocked by an accident or whatever I can actually see. We had deployed black hawks down to South Carolina. The weather forecast was inaccurate as we know and they started coming towards North Carolina so we basically redeployed those helicopters back into our state. As the SERT leader I can sit there and look on my computer and actually see the helicopter coming back to North Carolina and was able to report that to the Governor and my boss the secretary, but also more importantly to make those decisions about the resources because as everybody knows resources are finite. This enables my team to sit there and basically place them, out on the battlefield where they are needed to be placed and then move them rapidly once we got them there and understand timelines and everything else so we have sort of crafted our own little resource tracker and these guys are the Cadillac of resource trackers. So the Guard supports it, I know the Patrol likes it, you've heard the Wildlife Commission. We have had several meetings about it we just don't have the funding for it.

Q: Rep. Boles- Director Sprayberry let me pursue that because it was a question that I had. In your personal opinion, does the requirement still exist that created the RFP to begin with, or has it been shadowed over because of funding?

A: Director Sprayberry- I think there is still the requirement and it's my understanding we had a pretty substantial bill coming in for incarcerated prisoners medical bill that we had to pay off and for sure you have to pay that bill so I think that is where the money went.



Q: Rep. Boles- So to follow up. As the Director of Emergency Management, it's your belief that the enhanced situational awareness technology that it's a requirement that we still have that if infused into all of our other resources like the fusion center at Isaac we would have a much better capability to handle emergencies of any type man-made or natural?

A: Director Sprayberry- Enhanced situational awareness is always better sir and so there is always that requirement. I think we will see that going into the future.

Q: Chairman Ron Rabin- I'm looking at your "height of birth" chart that we were provided and if I take that and put it over the CERC that's another chart. I guess the question runs like this, if there is an attack and you have the surge protectors that you're talking about and all the electrical generation stuff is wiped what the surge protectors are protecting against? There can't be a surge because there is no electricity the way I would look at the problem.

A: Dr. Peter Vincent Pry- Well you're not just protecting, that was an example of protecting a transformer but that wasn't meant as an example of how you protect the whole system. To protect the whole system you would do things like install faraday cages to protect your skaters so the other electronic doesn't get wiped and in fact you're hardening the electric grid so it stays up. At minimum with a worst case scenario if you did that there are some plans to keep the cost very low where all you do is harden the transformers because those things are very hard to replace. So you would be able to bring the electric grid back very quickly under a worst case scenario. Preferably you would protect the electric grid well enough so that it wouldn't go down at all.

Q: Chairman Ron Rabin- there is a difference in cost and cost effectiveness. I'm thinking about the practicality of North Carolina being able to protect its grid when all other grids are being attacked and I know that the energy is shared between states and between regions. So if there is nothing coming in, like if they wipe one up in New York or the other regions where would we get the electricity that we are protecting with the surge protectors

A: Dr. Peter Vincent Pry- If you had no energy generation capability in North Carolina that would be true but we do have sources of generation here in North Carolina including nuclear reactors and protecting your generators as well so that you would be able to be self-proficient in terms of the energy and that's where you would get the electricity from within North Carolina

Q: Chairman Ron Rabin- So we are producing power at a nuclear plant? And it gets on these little wires, which I don't know much about, and gets out onto the grid. An EMP attack is going to allow the generation of power to continue, the collectors as it comes up and then gets transformed out you have a process there that says here is the generator here is the electricity coming out and here is all the little terminals it goes into and then flows out into whatever area it's supporting wouldn't the EMP attack melt the collector to begin with?

A: Dr. Peter Vincent Pry- Only if it's unprotected if you have put it in a faraday cage or a surge arrester so it is protected it would be able to continue to operate just as our critical military systems are able to operate though worst case nuclear EMP scenarios. This is how we have been protecting our military's critical infrastructures for decades there is no reason it would not work with civilian critical infrastructures as well in fact would be easier to do because the demands are much less than our military requirements.



Q: Chairman Ron Rabin- We're stagnant on this issue right now. True?

A: Dr. Peter Vincent Pry- Yes you have a group in North Carolina they may know more about it, in fact I was invited here by concerned citizens of this state. From talking to them and what my knowledge is that we basically are at a standstill here as are the other states except for the states previously mentioned very few of them have taken the initiative to doing that we're hoping that that can be turned around. North Carolina was the first in flight maybe they should be the first to lead the way on the defense industry of the future.

Q: Rep. Garland Pierce- how many incidents go unreported to the public you have brought up a lot of things here or there some things that you just keep secret so the public won't be alarmed by some of these incidents? Is this really happening?

A: Dr. Peter Vincent Pry- I'm sure there are thousands of cyber incidents that unreported to the public and good example is the attack that was made on the transformer substation in California outside of San Francisco back in 2013 which is still unsolved a group of people armed with automatic weapons ak-47's, the favorite small arm of terrorists, attacked the HV transformer substation and nearly caused it to collapse which would have been a serious development for them because that serviced silicon valley is could have started a cascading failure that would have affected the western grid the NERC and PG&E the California utility basically covered that up and tried to report it as vandalism to suppress that information and it only came out when then the acting chairman of the US Federal Energy Regulatory Commission resigned his position so that he could be interviewed by the Wall Street Journal, he broke the story 18 months after the incident had happened that this was not an act of vandalism the FERC brought in the people who trained the US Navy Seals to look at how it was done and it was the judgement of the seals that this was a professional commando type operation because the kinds of operational steps that were taken in the way it was planned and the ability to access an underground tunnel and know which wires to cut was the way the seals would have done it and we still don't know who did that. It happened amidst the 2013 nuclear crisis with North Korea on the very day that the attack happened on a Metcalf transformer substation that is the day the KMS II satellite flew over Washington DC. That is an example of a very significant probably terrorist, that the seals judged this was a practice run or dry run kind of like an exercise being conducted by some hostile entity probably a hostile foreign power to see if they could get away with it. To prepare in the future a larger scale attack. That was the judgement of the seals that was the judgement of the US FERC, very big story and the industry tried to cover it up and it only came out with resignation. I salute him because that is a big thing for someone to reign as chairman so he may go public with the story so when they're covering up that kind of thing you can just imagine what else is being covered up, much smaller scale incidents the cyber-attacks that we know that happen you know hundreds of them every day. I'm sure there is much more we don't know about.

Q: Sen. John Alexander- I assume from your presentation that this type of protection you are advocating is not going on in the United States now also is there a way for North Carolina to protect just itself if no one else wants to participate?

A: Dr. Peter Vincent Pry- Yes, this is one of the things the commission recommended it is called islanding. You can turn North Carolina into an island so even though you are a part of the larger



eastern grid and are coupled in with other states you can protect the assets within North Carolina your ability to generate electric power and your ability to distribute/transmit it. You can keep the lights on in North Carolina and avoid the worst consequences of an EMP catastrophe all by yourself and survive as an island. But if you do nothing and are unprotected you will be going down with everyone else. Other states have taken some initiatives such as

Q: Sen. John Alexander- What would this cost, in dollars, in North Carolina to get this work done?

A: Dr. Peter Vincent Pry- Well, that would be part of your study. It would be highly affordable. A rough rule of thumb is it shouldn't cost more than a half a million dollars per EHV transformer substation. I'm not sure how many substations you have got in North Carolina but let's say there is about 30. That would be about 15 million dollars. That is the top of the line if you're paying more than that you're getting ripped off. It should cost no more than 15 million or less because that estimate is based on the most expensive blocking device you can buy, there are less expensive ways of doing it out there. That's the estimate if you have 30 substations, I'm sure duke energy could let you know how many they have but that sounds like a reasonable number for a state of your size.

Richard Robertson- My law firm sponsored Dr.Pry to come today simply because of reading about this issue for many years and Dr.Pry's leadership to the country on this issue and realizing that we are in grave times. We know this is a difficult issue to tackle but North Carolina has a history of handling disasters very well even duke energy has a history of handling disasters very well. This is one we need to tackle it's not that expensive. Dr.Pry just to be sure of what issue you raise you mentioned the military has hardening of its' systems we are in a state that has a large and critical military presence for our country. Is the military vulnerable to these same issues?

A: Dr. Peter Vincent Pry- Yes they are, more so than they were back in the early cold war. Back in the fifties and sixties it was a requirement that military bases be self-sufficient in terms of their energy that requirement has gone away over the years so now they depend on the civilian grid. The military bases are now lost too if the civilian grid is not protected. I think that would be a potential opportunity to work with the federal government, the Department of Defense, in protecting North Carolina because there is a larger National security interest with those bases being protected. One idea was the new National Defense Authorization Act actually includes provisions to encourage military bases to become self-sufficient of the electric grid. One Possible solution would be to, currently the rules in North Carolina don't permit military bases from becoming self-sufficient that they have to negotiate or can't on their own bring in a modular nuclear reactor for example to beef up the base. If that were adjusted so that military bases may do that they could bring in generating capacity so they could protect not just themselves but be able to help support the civilian grid and be a way of bringing back the civilian grid. My own preference though is for the civilian grid itself to be protected. My fear is that the way these things usually work is that the Department of Defense may just protect its' military base and then leave the civilian population vulnerable as we have throughout our history our constitution calls for providing for the common defense of all the people. I think the American people want to be



protected not just avenged and that's the current posture that were putting on an idea that deterrents will work to avenge deaths of millions of American people is going to be sufficient to protect them but this increasingly dangerous world I think the likelihood of deterrence is increasingly likely to fail. Anyone who knows history just look back at all the wars we have had happened in history all of those are examples of failure in deterrence.

Steven Volan- Hi, my name is Steven Volan, I am a Raleigh resident but I also serve as co-chair to the FBI guard's electromagnetic pulse special interest group. I would love to facilitate our involvement to help this legislature to be aware of more opportunities to address this issue. I am aware that there have been some economic studies funded for the Carolinas through the Foundation for Resilient Societies as an example in cooperation with some activities in South Carolina the National Defense Authorization Act Dr.Pry referenced for us to address this exact issue in combination with cyber-risk to put power plants back on site and allow for third party power producers that are not regular utilities companies to operate on site with a military base and still be able to sell power off site to fund that power station so that it is at no cost to the military base an example would be to place one of these at Fort Bragg it could power both Fort Bragg, which consumes 1/5 of the army's energy and does not produce energy on site, and power the surrounding counties. But it is my understanding after conversations with Fort Bragg that they are not allowed to do such things because the rules of North Carolina prohibit that kind of power generation unlike in other states that Dr.Pry had mentioned where the power companies are able to. Just wanted to make you all aware of that also I want to give kudos to our emergency management department here, to my knowledge we are the only state that has any sort of EMP annexed to our state emergency plan and also through the leadership of the lieutenant governor with the energy policy council we have had both a solar weather storm and EMP awareness exercises here two years in a row. So we are taking steps forward in North Carolina and we have an opportunity to bring this together in a decisive way for a fact instead of simply promoting awareness. I am a resident here and am happy to help in the future if needed.

Director Mike Sprayberry- We have had a couple of table tops, we have also participated in an exercise with South Carolina and our National Guard partners as well. Ironically enough we are having our emergency energy work group meeting today where we are going to go over the results of our table tops again the lieutenant governor's office which has been decisively engaged in that along with our local partners, our utility partners, and other state agencies. So we are working on that we also have an ongoing project on the economic effects of an EMP going off over our state. We are working on EMP we know we have a long ways to go but I just didn't want you to think that we were unaware of it and that we are working on it.

Q: Chairman John Faircloth- I believe we have some representatives from the utilities here correct? Would it be appropriate for us to take a few minutes for you to say anything you might have or would you like for us to wait until next meeting?

A: Susan Vick (Duke Energy)- As you will recall we made a lengthy and collective presentation to you all in October. Duke Energy, Dominion Energy, the Co-ops, communities and electricity's about our preparedness and the litany of things we are doing some that we can talk about openly and some that we cannot. Dr.Pry is a huge advantage to us for being able to talk so fully and



freely. If this committee deems that we need to come back and refresh that presentation, I know that it is still online under this committee's website, we are happy to do that. Duke Energy is the nation's largest utility and we believe at the forefront of this I know that ambassador Henry Cooper has presented to US Congress last may about our work in this area and how pleased and proud he was of our efforts and I know that Dr.Pry has complimented Dominion here today and we complement our industry colleagues. So we are happy to refresh that presentation if we need to do so.

Q: Chairman John Faircloth- thank you for that offer and I think between now and our next meeting my co-chair and I were sitting down and talking about how we want to address this. We will go back and review your presentation and will probably contact you and see what is the best way around here. I would like to also personally thank Dr.Pry for being here you have opened up our eyes quite a bit and it is a frightening thing but we want to make sure we have all views on the table.

Rep. Larry Pittman- Regarding the question of how to prevent such incidents as the one that occurred in Florida yesterday, I proposed a solution at our last meeting which makes as much sense, and is more in compliance with the Second Amendment, than anything else I have heard being suggested.

Yet, instead of being given fair consideration, my proposal was sneered at in a very dismissive manner. You might be surprised at how many people actually agree with me, who don't have the ear of the media.

One of them is a police officer who provides such training. He met with Rep. Speciale and me yesterday, and would like to speak to this committee about offering training services for teachers and school administrators, as I have suggested. I expect the committee members to hear from him, asking to meet with this committee, and I hope that will be granted.

We have to get over this useless hysteria about guns and allow school personnel to have a chance to defend the lives of their students and themselves. If that had been in place at Sandy Hook Elementary, Columbine and that school in Florida yesterday, many lives could have been saved that were lost before the police could get there.

That is the bottom line. It is irresponsible of us not even to consider this option. If this officer is not heard in this committee, Rep. Speciale and I intend to invite him to speak to ours.

By not allowing responsible citizens to exercise their right of self-defense, government officials are accountable for the number of deaths and injuries being as high as they are in these incidents. That *must* change.

Rep. Garland Pierce- I understand Representative Pittman's passion for that what he shared with us. Are you proposing that we should train our classroom teachers and those in our school systems, this is not a physical question its' just what you're saying, they should be trained and armed to protect our children's school systems.

Pittman - Yes sir for instance that brave principal at Sandy Hook elementary if she could have stood still and taken aim she could've took that guy out and saved her life and a lot of others but instead, she ran at him unarmed was shot down and a lot of other kids died who might not have



had she been able to take him out. This officer who spoke to Representative Speciale and myself offered that kind of training he would like to see teachers and principals given the proper training and then allowing them to carry in the schools and as great as our police are they can't always be there and by the time they get there they say it's usually over and all those lives are lost when some of them could have been saved.

There being no further business, the meeting adjourned at 11:41.

Presiding

Chandra C. Reed, Committee Clerk